

## **NPDES PERMIT**

**issued to**

Seidel, Inc.  
1883 Thomaston Avenue  
Waterbury, CT 03704

**Location Address:**

Seidel, Inc.  
1883 Thomaston Avenue  
Waterbury, CT 03704

**Facility ID:** 151-215

**Permit ID:** CT0026808

**Receiving Stream:** Naugatuck River

**Permit Expires:** June 12, 2011

### **SECTION 1: GENERAL PROVISIONS**

- (A) This permit is reissued in accordance with section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and section 402(b) of the Clean Water Act, as amended, 33 USC 1251, et. seq., and pursuant to an approval dated September 26, 1973, by the Administrator of the United States Environmental Protection Agency for the State of Connecticut to administer an N.P.D.E.S. permit program.
- (B) Seidel, Inc., ("Permittee"), shall comply with all conditions of this permit including the following sections of the RCSA which have been adopted pursuant to section 22a-430 of the CGS and are hereby incorporated into this permit. Your attention is especially drawn to the notification requirements of subsection (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(10)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (l)(2) of section 22a-430-3.

section 22a-430-3 General Conditions

- (a) Definitions
- (b) General
- (c) Inspection and Entry
- (d) Effect of a Permit
- (e) Duty
- (f) Proper Operation and Maintenance
- (g) Sludge Disposal
- (h) Duty to Mitigate
- (i) Facility Modifications; Notification
- (j) Monitoring, Records and Reporting Requirements
- (k) Bypass
- (l) Conditions Applicable to POTWs
- (m) Effluent Limitation Violations (Upsets)
- (n) Enforcement
- (o) Resource Conservation
- (p) Spill Prevention and Control

- (q)Instrumentation, Alarms, Flow Recorders
- (r)Equalization

section 22a-430-4 Procedures and Criteria

- (a)Duty to Apply
- (b)Duty to Reapply
- (c)Application Requirements
- (d)Preliminary Review
- (e)Tentative Determination
- (f)Draft Permits, Fact Sheets
- (g)Public Notice, Notice of Hearing
- (h)Public Comments
- (i)Final Determination
- (j)Public Hearings
- (k)Submission of Plans and Specifications. Approval.
- (l)Establishing Effluent Limitations and Conditions
- (m)Case by Case Determinations
- (n)Permit issuance or renewal
- (o)Permit Transfer
- (p)Permit revocation, denial or modification
- (q)Variances
- (r)Secondary Treatment Requirements
- (s)Treatment Requirements for Metals and Cyanide
- (t)Discharges to POTWs - Prohibitions

- (C) Violations of any of the terms, conditions, or limitations contained in this permit may subject the Permittee to enforcement action including, but not limited to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA.
- (D) Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense under section 22a-438 or 22a-131a of the CGS or in accordance with section 22a-6, under section 53a-157b of the CGS.
- (E) The authorization to discharge under this permit may not be transferred without prior written approval of the Commissioner. To request **such approval, the Permittee and proposed transferee shall register such proposed transfer with the Commissioner, at least 30 days prior to the transferee becoming legally responsible for creating or maintaining any discharge which is the subject of the permit transfer. Failure, by the transferee, to obtain the Commissioner's approval prior to commencing such discharge(s) may subject the transferee to enforcement action for discharging without a permit pursuant to applicable sections of the CGS and RCSA.**
- (F) **No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the Permittee pursuant to this permit will result in compliance or prevent or abate pollution.**
- (G) **Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.**
- (H) **An annual fee shall be paid for each year this permit is in effect as set forth in section 22a-430-7 of the Regulations of Connecticut State Agencies.**

## SECTION 2: DEFINITIONS

- (A) The definitions of the terms used in this permit shall be the same as the definitions contained in section 22a-423 of the CGS and section 22a-430-3(a) and 22a-430-6 of the RCSA, except for "No observable acute effect level (NOAEL)" which is redefined below.

- (B) In addition to the above, the following definitions shall apply to this permit:

"-----" in the limits column on the monitoring table means a limit is not specified but a value must be reported on the DMR

"Annual" in the context of any sampling frequency found in Section 5, shall mean the sample must be collected in the month of January.

"Average Monthly Limit"; means the maximum allowable "Average Monthly Concentration" as defined in section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g. mg/l); otherwise, it means "Average Monthly Discharge Limitation" as defined in section 22a-430-3(a) of the RCSA.

"Critical Test Concentration (CTC)" means the specified effluent dilution at which the Permittee is to conduct a single-concentration Aquatic Toxicity test.

"Daily Concentration" means the concentration of a substance as measured in a daily composite sample, or, the arithmetic average of all grab sample results defining a grab sample average.

"Daily Quantity" means the quantity of waste discharged during an operating day.

"Instantaneous Limit" means the highest allowable concentration of a substance as measured by a grab sample, or the highest allowable measurement of a parameter as obtained through instantaneous monitoring.

"In stream Waste Concentration (IWC)" means the concentration of a discharge in the receiving water after mixing has occurred in the allocated zone of influence.

"Maximum Daily Limit", means the maximum allowable "Daily Concentration" (defined above) when expressed as a concentration (e.g. mg/l); otherwise, it means the maximum allowable "Daily Quantity" as defined above, unless it is expressed as a flow quantity. If expressed as a flow quantity it means "Maximum Daily Flow" as defined in section 22a-430-3(a) of the RCSA.

"NA" as a Monitoring Table abbreviation means "not applicable".

"NR" as a Monitoring Table abbreviation means "not required".

"Quarterly", in the context of a sampling frequency, means sampling is required in the months of January, April, July and October.

"Range During Sampling" ("RDS"), as a sample type, means the maximum and minimum of all values recorded as a result of analyzing each grab sample of; 1) a Composite Sample, or, 2) a Grab Sample Average. For those Permittees with continuous monitoring and recording pH meters, Range During Sampling means the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.

"Range During Month" ("RDM"), as a sample type, means the lowest and the highest values of all

of the monitoring data for the reporting month.

"Twice per Month" when used as a sample frequency shall mean two samples per calendar month collected no less than 12 days apart.

"ug/l" means micrograms per liter.

### **SECTION 3: COMMISSIONER'S DECISION**

- (A) The Commissioner of Environmental Protection ("Commissioner"), has issued a final determination and found that continuance of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on **application #200401048** for permit reissuance received on March 31, 2004 and the administrative record established in the processing of that application.
- (B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, the above referenced application, and all approvals issued by the Commissioner or her authorized agent for the discharges and/or activities authorized by, or associated with, this permit.
- (C) The Commissioner reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the Federal Clean Water Act or the CGS or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Clean Water Act or CGS or regulations adopted thereunder which are then applicable.

### **SECTION 4: GENERAL EFFLUENT LIMITATIONS**

- (A) No discharge shall contain, or cause in the receiving stream, a visible oil sheen or floating solids; or, cause visible discoloration or foaming in the receiving stream.
- (B) No discharge shall cause acute or chronic toxicity in the receiving water body beyond any zone of influence specifically allocated to that discharge in this permit.
- (C) The temperature of any discharge shall not increase the temperature of the receiving stream above 85°F, or, in any case, raise the normal temperature of the receiving stream more than 4°F.

### **SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

- (A) The discharge shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharge is restricted by, and shall be monitored in accordance with, the tables below:

Table A									
Discharge Serial Number: 001-1			Monitoring Location: 1						
Wastewater Description: Aluminum anodizing, electropolishing, demineralizer and air scrubber wastewaters									
Monitoring Location Description: from the pH end control tank									
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test <sup>3</sup>
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency <sup>2</sup>	Sample Type or measurement to be reported	
Flow, Average Daily <sup>1</sup>	gpd	72,000	NA	continuous/monthly	see remarks	NA	NR	NA	
Flow, Maximum Daily <sup>1</sup>	gpd	NA	120,000	continuous/monthly	see remarks	NA	NR	NA	
Flow, Day of Sampling	gpd	NA	120,000	Weekly	daily flow	NA	NR	NA	
pH, Day of Sampling	S.U.	NA	NA	NR	NA	6.0 - 9.0	Weekly	RDS	
pH, Continuous	S.U.	NA	NA	NR	NA	6.0 - 9.0	continuous/ Monthly	RDM	
Hours of Discharge	hr.	NA	----	Weekly	Total hours	NA	NR	NA	
Aluminum-Total	mg/l	2.0	4.0	Weekly	daily composite	6.0	NR	NA	
Cadmium-Total	mg/l	0.03	0.04	Quarterly	daily composite	0.06	NR	NA	*
Cadmium	kg/day	0.007	0.011	Quarterly	daily composite	NA	NR	NA	*
Chromium-Total	mg/l	1.70	2.77	Annual	daily composite	2.77	NR	NA	
Copper-Total	mg/l	0.24	0.35	Weekly	daily composite	0.52	NR	NA	*
Copper	kg/day	0.065	0.095	Weekly	daily composite	NA	NR	NA	*
Cyanide-Total	mg/l	0.211	0.423	Annual	grab sample average	0.423	NR	NA	
Lead-Total	mg/l	0.048	0.077	Quarterly	daily composite	0.12	NR	NA	*
Lead	kg/day	0.013	0.021	Quarterly	daily composite	NA	NR	NA	*
Nickel-Total	mg/l	1.0	2.0	Quarterly	daily composite	3.0	NR	NA	
Silver-Total	mg/l	0.025	0.037	Weekly	daily composite	0.06	NR	NA	*
Silver	kg/day	0.0068	0.010	Weekly	daily composite	NA	NR	NA	*
Temperature	of	NA	NA	NR	NA	----	Weekly	Grab	
Total Suspended Solids	mg/l	20.0	30.0	Weekly	daily composite	45.0	NR	NA	
Total Toxic Organics <sup>4</sup>	mg/l	NA	NA	NR	NA	0.50	Weekly	Grab	
Zinc-Total	mg/l	0.61	0.89	Quarterly	daily composite	1.3	NR	NA	*

Zinc	kg/day	0.17	0.20	Quarterly	daily composite	NA	NR	NA	*
Footnotes:									
Table A Footnotes:									
1 For this parameter the permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each month.									
2 The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.									
3 Minimum Level Test refers to Section 6 Paragraph (3) of this permit.									
4 See section 8 paragraph (D).									

TABLE B

Discharge Serial Number (DSN):001-1		Monitoring Location: T			
Wastewater Description: Aluminum anodizing, electropolishing, demineralizer and air scrubber wastewaters					
Monitoring Location Description: from the pH end control tank					
Allocated Zone of Influence (ZOI): 145,411 gph		In stream Waste Concentration (IWC): 2.0%			
PARAMETER	Units	Maximum Daily Limit	Sampling Frequency	Sample Type	Minimum Level Analysis See Section 6
Aquatic Toxicity, Daphnia, Pulex <sup>1</sup>	%	LC50 > 40%	Quarterly	Daily Composite	
Aquatic Toxicity, Pimephales promelas <sup>1</sup>	%	LC50 > 40%	Quarterly	Daily Composite	*
Cadmium-Total	mg/l	----	Quarterly	Daily Composite	*
Copper-Total	mg/l	----	Quarterly	Daily Composite	
Cyanide-Amenable	mg/l	----	Quarterly	Daily Composite	
Cyanide-Total	mg/l	----	Quarterly	Daily Composite	
Lead-Total	mg/l	----	Quarterly	Daily Composite	*
Nickel-Total	mg/l	----	Quarterly	Daily Composite	
Nitrogen, Ammonia (total as N)	mg/l	----	Quarterly	Daily Composite	
Nitrogen, Nitrate, (total as N)	mg/l	----	Quarterly	Daily Composite	
Nitrogen, Nitrite, (total as N)	mg/l	----	Quarterly	Daily Composite	
Silver, Total	mg/l	----	Quarterly	Daily Composite	*
Zinc, Total	mg/l	----	Quarterly	Daily Composite	*
<b>Remarks:</b>  Note: All analyses shall be on the same sample. <sup>4</sup> The results of the Toxicity Tests are recorded in % survival, however, the permittee shall report pass/fail on the DMR based on the criteria in Section 6(B) of this permit.					

- (1) All samples shall be comprised of only the wastewater described in this table. Samples shall be collected prior to combination with receiving waters or wastewater of any other type, and after all approved treatment units, if applicable. All samples collected shall be representative of the discharge during standard operating conditions.
- (2) In cases where limits and sample type are specified but sampling is not required by this permit, the limits specified shall apply to all samples which may be collected and analyzed by the Department of Environmental Protection personnel, the Permittee, or other parties.
- (3) The limits imposed on the discharges listed in this permit take effect on the issuance date of this permit, hence any sample taken after this date which, upon analysis, shows an exceedance of permit limits will be considered non-compliance.

The monitoring requirements begin on the date of issuance of this permit if the issuance date is on

or before the 12th day of a month. For permits issued on or after the 13th day of a month, monitoring requirements begin the 1st day of the following month.

## **SECTION 6: SAMPLE COLLECTION, HANDLING and ANALYTICAL TECHNIQUES**

### **(A) Chemical Analysis**

- (1) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved pursuant to the Code of Federal Regulations, Part 136 of title 40 (40 CFR 136) unless an alternative method has been approved in writing pursuant to 40 CFR 136.4 or as provided in section 22a-430-3(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 shall be analyzed in accordance with methods specified in this permit.
- (2) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136 unless otherwise specified.
- (3) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Section 5 Tables A and B. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

<u>Parameter</u>	<u>Minimum Level</u>
Cadmium	0.5 ug/L
Copper	5.0 ug/L
Cyanide	10.0 ug/L
Lead	5.0 ug/L
Nickel	5.0 ug/L
Silver	2.0 ug/L
Zinc	10.0 ug/L

- (4) The value of each parameter for which monitoring is required under this permit shall be reported to the maximum level of accuracy and precision possible consistent with the requirements of this section of the permit.
- (5) Effluent analyses for which quantification was verified during the analysis at or below the minimum levels specified in this section and which indicate that a parameter was not detected shall be reported as "less than x" where 'x' is the numerical value equivalent to the analytical method detection limit for that analysis.
- (6) Results of effluent analyses which indicate that a parameter was not present at a concentration greater than or equal to the Minimum Level specified for that analysis shall be considered equivalent to zero (0.0) for purposes of determining compliance with effluent limitations or conditions specified in this permit.

### **(B) Acute Aquatic Toxicity Test**

- (1) Samples for monitoring of Aquatic Toxicity shall be collected and handled as prescribed in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012).



- (a) Composite samples shall be chilled as they are collected. Grab samples shall be chilled immediately following collection. Samples shall be held at 4 degrees Centigrade until Aquatic Toxicity testing is initiated.
  - (b) Effluent samples shall not be dechlorinated, filtered, or, modified in any way, prior to testing for Aquatic Toxicity unless specifically approved in writing by the Commissioner for monitoring at this facility.
  - (c) Chemical analyses of the parameters identified in Section 5 Tables A and B shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.
    - (i) At a minimum, pH, specific conductance, total alkalinity, total hardness, and total residual chlorine shall be measured in the effluent sample and, during Aquatic Toxicity tests, in the highest concentration of test solution and in the dilution (control) water at the beginning of the test and at test termination. If Total Residual Chlorine is not detected at test initiation, it does not need to be measured at test termination. Dissolved oxygen, pH, and temperature shall be measured in the control and all test concentrations at the beginning of the test, daily thereafter, and at test termination.
  - (d) Tests for Aquatic Toxicity shall be initiated within 36 hours of sample collection.
- (2) Monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (invertebrate) above shall be conducted for 48-hours utilizing neonatal Daphnia pulex (less than 24-hours old).
  - (3) Monitoring for Aquatic Toxicity to determine compliance with the permit limit [condition] on Aquatic Toxicity (vertebrate) above shall be conducted for 48-hours utilizing larval Pimephales promelas (1-14 days old with no more than 24-hours range in age).
  - (4) Tests for Aquatic Toxicity shall be conducted as prescribed for static non-renewal acute tests in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012), except as specified below.
    - (a) Definitive (multi-concentration) testing, with LC50 as the endpoint, shall be conducted to determine compliance with limits on Aquatic Toxicity and monitoring conditions and shall incorporate, at a minimum, the following effluent concentrations:
      - (i) For Aquatic Toxicity Limits expressed as LC50 values of 33% or greater: 100%, 75%, 50%, 25%, 12.5%, and 6.25%
      - (ii) For Aquatic Toxicity Limits expressed as LC50 values between 15% and 33% and for monitoring only conditions: 100%, 50%, 25%, 12.5%, and 6.25%
      - (iii) For Aquatic Toxicity Limits expressed as LC50 values of 15% or less: 100%, 50%, 25%, 12.5%, 6.25%, and 3%
    - (b) For Aquatic Toxicity Limits and for monitoring only conditions, expressed as an NOAEL value, Pass/Fail (single-concentration) tests shall be conducted at a specified Critical Test Concentration (CTC) equal to the Aquatic Toxicity Limit, or 100% in the case of monitoring only conditions, as prescribed in section 22A-430-3(j)(7)(A)(I) of the Regulations of Connecticut State Agencies, except that five replicates of undiluted effluent and five replicates of effluent diluted to the CTC shall be included.

- (c) Organisms shall not be fed during the tests.
  - (d) Copper nitrate shall be used as the reference toxicant in tests with freshwater organisms.
  - (e) Synthetic freshwater prepared with deionized water adjusted to a hardness of 50 mg/L (plus or minus 5 mg/L) as CaCO<sub>3</sub> shall be used as dilution water in tests with freshwater organisms.
- (5) Compliance with limits on Aquatic Toxicity shall be determined as follows:
- (a) For limits expressed as a minimum LC<sub>50</sub> value, compliance shall be demonstrated when the results of a valid definitive Aquatic Toxicity test indicates that the LC<sub>50</sub> value for the test is greater than the Aquatic Toxicity Limit.

## SECTION 7: REPORTING REQUIREMENTS

- (A) The results of chemical analyses and any aquatic toxicity test required above shall be entered on the Discharge Monitoring Report (DMR), provided by this office, and reported to the Bureau of Water Management (Attn: DMR Processing) at the following address. The report shall also include a detailed explanation of any violations of the limitations specified. The DMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Water Management (Attn: DMR Processing)  
Connecticut Department of Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

- (B) Complete an accurate aquatic toxicity test data, including percent survival of test organisms in each replicate test chamber, LC<sub>50</sub> values and 95% confidence intervals for definitive test protocols, and all supporting chemical/physical measurements performed in association with any aquatic toxicity test, including measured daily flow and hours of operation for the 30 consecutive operating days prior to sample collection if compliance with a limit on Aquatic Toxicity is based on toxicity limits based on actual flows described in Section 7, shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR) and sent to the Bureau of Water Management at the following address:

Bureau of Water Management (Attn: Aquatic Toxicity)  
Connecticut Department of Environmental Protection  
79 Elm St.  
Hartford, CT 06106-5127

- (C) If this permit requires monitoring of a discharge on a calendar basis (e.g. Monthly, quarterly, etc.), but a discharge has not occurred within the frequency of sampling specified in the permit, the Permittee must submit the DMR and ATMR, as scheduled, indicating "NO DISCHARGE". For those Permittees whose required monitoring is discharge dependent (e.g. per batch), the minimum reporting frequency is monthly. Therefore, if there is no discharge during a calendar month for a batch discharge, a DMR must be submitted indicating such by the end of the following month.
- (D) For any table above that requires Total Toxic Organics (TTO) monitoring, the Permittee may, in lieu of analyzing for Total Toxic Organics, include a statement on the DMR, at the frequency required, certifying compliance with your Solvent Management Plan if such plan has been approved by the Commissioner in accordance with 22a-430-4(l) of the RCSA and by 40CFR433 (Metal Finishing). If such approval has been

granted and the reports include the compliance statement, sampling for Total Toxic Organics is no longer a requirement of this permit.

**SECTION 8: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS**

- (A) If any sample analysis indicates that an Aquatic Toxicity effluent limitation in Section 5 of this permit has been exceeded, or that the test was invalid, another sample of the effluent shall be collected and tested for Aquatic Toxicity and associated chemical parameters, as described above in Section 5 and Section 6, and the results reported to the Bureau of Water Management (Attn: DMR Processing), at the address listed above, within 30 days of the exceedance or invalid test. Results of all tests, whether valid or invalid, shall be reported.
- (B) If any two consecutive test results or any three test results in a twelve month period indicates that an Aquatic Toxicity Limit has been exceeded, the Permittee shall immediately take all reasonable steps to eliminate toxicity wherever possible and shall submit a report to Bureau of Water Management (Attn: Aquatic Toxicity) for the review and approval of the Commissioner in accordance with section 22a-430-3(j)(10)(c) of the RCSA describing proposed steps to eliminate the toxic impact of the discharge on the receiving water body. Such a report shall include a proposed time schedule to accomplish toxicity reduction and the Permittee shall comply with any schedule approved by the Commissioner.
- (C) The Permittee shall notify the Bureau of Water Management, Permitting and Enforcement Division, within 72 hours and in writing within thirty days of the discharge of any substance listed in the application but not listed in the permit if the concentration or quantity of that substance exceeds two times the level listed in the application.

This permit Is hereby issued on 6/13/06

/s/GINA MCCARTHY  
Gina McCarthy  
Commissioner

GM/OR

## DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Seidel, Inc.

PAMS Company ID: 42657

### PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0026808

APPLICATION #: 200401048

FACILITY ID. 151-215

<b><u>Mailing Address:</u></b>						<b><u>Location Address:</u></b>					
<b>Street:</b>	1883 Thomaston Avenue					<b>Street:</b>	1883 Thomaston Avenue				
<b>City:</b>	Waterbury	<b>ST:</b>	CT	<b>Zip:</b>	06704	<b>City:</b>	Waterbury	<b>ST:</b>	CT	<b>Zip:</b>	06704
<b>Contact Name:</b>	Michael Ritzenhoff					<b>DMR Contact</b>	Michael Ritzenhoff				
<b>Phone No.:</b>	203-757-7349					<b>Phone No.:</b>	same				

### PERMIT INFORMATION

**DURATION**    5 YEAR   x                        10 YEAR                         30 YEAR   

**TYPE**                      New                         Reissuance   x                        Modification   

**CATEGORIZATION**    POINT (X)                      NON-POINT ( )                      GIS #   13095  

NPDES (X)                      PRETREAT ( )                      GROUND WATER(UIC) ( )                      GROUND WATER (OTHER) ( )

NPDES MAJOR (MA)   x  

NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI)   

NPDES or PRETREATMENT MINOR (MI)   

PRETREAT SIGNIFICANT INDUS USER (SIU)   

PRETREAT CATEGORICAL (CIU)   

Note: If it's a CIU then check off SIU

POLLUTION PREVENTION MANDATE \_\_

ENVIRONMENTAL EQUITY ISSUE \_\_

**COMPLIANCE ISSUES**

COMPLIANCE SCHEDULE YES NO (x) (If yes check off what it is in relation to.)

POLLUTION PREVENTION \_\_ TREATMENT REQUIREMENT \_\_ WATER CONSERVATION \_\_

WATER QUALITY REQUIREMENT \_\_ REMEDIATION \_\_ OTHER

IS THE PERMITTEE SUBJECT TO A PENDING ENFORCEMENT ACTION? NO x YES \_\_

**OWNERSHIP CODE**

Private x Federal \_\_ State \_\_ Municipal (town only) \_\_ Other public \_\_

DEP STAFF ENGINEER Olimpia Rea

**PERMIT FEES**

Discharge Code	DSN	Annual Fee
101035n	001	\$0.00

*\*Metal finishing fee of \$5,450 is billed under SP0000480.*

**FOR NPDES DISCHARGES**

Drainage basin Code: 6900-00-4-R9

Present/Future Water Quality Standard: C/B

**FOR UIC PERMITS**

Drainage basin Code: n/a

Water Quality Standard: n/a

Total Wells \_\_ Well Type \_\_

**NATURE OF BUSINESS GENERATING DISCHARGE**

*Process wastewaters are generated from Aluminum anodizing, electropolishing, demineralizer and air scrubber wastewaters.*

**PROCESS AND TREATMENT DESCRIPTION (by DSN)**

*DSN 001-1- Process wastewaters are treated through neutralization, flocculation, clarification and pH adjustment.*

**RESOURCES USED TO DRAFT PERMIT**

x Federal Effluent Limitation Guideline 40CFR 433.14  
PART 433—Metal Finishing Point Source Category  
§433.14; Subpart A, (BAT)

*best available technology economically achievable*

- ☐ Performance Standards
- ☐ Federal Development Document \_\_\_\_\_  
name of category
- ☐ Treatability Manual
- ☒ Department File Information
- ☒ Connecticut Water Quality Standards
- ☐ Coastal Management Consistency Review Form
- ☒ Other - Explain

#### **BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS**

- ☒ Best Available Technology (BAT)  
*CFR 433.14*  
*Chromium-Total (concentration, 2.77 mg/l-max.)*
- ☒ Best Professional Judgment and a Case-by-Case Determination
- ☒ Section 22a-430-4(s) of the Regulations of Connecticut State Agencies  
*Aluminum-Total, Nickel-Total, Total Suspended Solids*
- ☒ In order to meet in-stream water quality (See General Comments)  
*Cadmium-Total (concentrations, .03, .04, mg/l-avg., max.)*  
*Cadmium-(mass-based, .007, .011, mg/l-avg., max.)*  
*Chromium-Total (concentration, 1.7 mg/l, avg.)*  
*Copper-Total (concentrations, .24, .35, mg/l-avg., max.)*  
*Copper-(mass-based, .065, .095, mg/l-avg., max.)*  
*Cyanide-Total (concentrations, .211, .423, mg/l-avg., max.)*  
*Lead-Total (concentrations, .048, .077 mg/l-avg., max)*  
*Lead-(mass based, .013, .021 kg/d-avg., max)*  
*Silver-Total (concentration, 0.025, .037, mg/l, avg., max.)*  
*Silver-(mass-based, .0068, .010 mg/l-avg., max.)*  
*Zinc-Total (concentrations, .61, .89 mg/l-avg., max)*  
*Zinc-(mass based, .17, .20 kg/d-avg., max)*

#### **GENERAL COMMENTS**

*In developing the permit's concentration limits, EPA Metal Finishing Categorical Limits (40 CFR Part 433.14) and Section 22a-430-4(s)(2) of the Regulations of Connecticut State Agencies limits were compared. The Connecticut limits were found to be more stringent for both Aluminum and Nickel and thus incorporated in the permit.*

*Water quality based discharge limitations were included in this permit for consistency with Connecticut Water Quality Standards and criteria, pursuant to 40 CFR 122.44(d). Each parameter was evaluated for consistency with the available aquatic life criteria (acute and chronic) and human health (fish consumption only) criteria,*

*considering the zone of influence allocated to the facility where appropriate. The statistical procedures outlined in the EPA Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001) were employed to calculate the limits. The most restrictive of the water quality limitations, aquatic life acute, aquatic life chronic, and human health, was compared with limitations developed according to State and Federal Best Available Technology (BAT). Where the water quality based limitations were more restrictive than BAT, the water quality based limitation was included in the permit as a mass limit in addition to the BAT concentration limit.*

#### **OTHER COMMENTS**

*The mass and concentration effluent limits for cadmium, copper, lead, silver and zinc authorized in this permit are water quality based limits. Average Monthly Limits for lead, both concentration and mass-based, are new water quality based limits.*

*Maximum Daily Limit for Chromium, concentration, is new water quality based limit. Average and Maximum Daily Limit for cyanide, concentration based, are new water quality based limits as well. Please refer to Interoffice Memorandum entitled Water Quality Based Criteria explaining derivation of water quality based limits for each individual parameter.*